



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0478; Directorate Identifier 2012-SW-092-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Agusta S.p.A. (Type Certificate currently held by AgustaWestland S.p.A.) Helicopters (Agusta)**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Agusta Model A109C, A109E, A109S, A109K2, and AW109SP helicopters. This proposed AD would require inspecting the lock wires securing the tail rotor (T/R) duplex bearing locking nut (locking nut) to determine whether any lock wires are missing or damaged. This proposed AD is prompted by reports of loosening T/R locking nuts, which if not corrected, could result in failure of the T/R and subsequent loss of control of the helicopter.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- **Fax:** 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Agusta Westland, Customer Support & Services, Via Per Tornaento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5110; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2012-0195-E, dated September 24, 2012, and corrected September 25, 2012 (AD 2012-0195-E), to correct an unsafe condition for certain Agusta Model A109E, A109LUH, A109S, AW109SP, A109C, and A109K2 helicopters. EASA advises that they have received reports of the T/R locking nut, part number (P/N) 109-0130-97, loosening on A109 helicopters.

According to EASA, an investigation revealed that, in every occurrence, one or both of the lock wires securing the locking nut were either damaged or absent from the T/R. EASA states that this condition, if not detected and corrected, could lead to failure of the T/R function and subsequent loss of control of the helicopter. The EASA AD requires repetitively inspecting the lock wires which secure the T/R locking nut for missing and damaged lock wires. The EASA AD also requires removing and reassembling the housing and slider group of the T/R rotating controls, which is terminating action for the repetitive inspections.

### **FAA's Determination**

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information**

Agusta has published Bollettino Tecnico (BT) No. 109-134 for Model A109C helicopters, BT No. 109EP-121 for Model A109E helicopters, BT No. 109S-48 for Model A109S helicopters, BT No. 109K-54 for Model A109K2 helicopters, and BT No. 109SP-051 for Model AW109SP helicopters. All of the BTs are dated September 21, 2012. The BTs specify procedures for inspecting the lock wires of the T/R locking nut and for removing and reassembling the housing and slider group of the T/R rotating controls.

## **Proposed AD Requirements**

This proposed AD would require:

- Within 5 hours time-in-service (TIS) inspecting both lock wires which secure the T/R locking nut to the housing to determine that both wires are present and not damaged. If only one wire is installed and it is not damaged, before further flight, installing a second lock wire. If one or both lock wires are installed, and either one or both are damaged, before further flight, removing and reassembling the housing and slider group of the T/R rotating controls.

- Within 25 hours TIS from the initial inspection, and thereafter at intervals not exceeding 25 hours TIS, inspecting both lock wires to determine that both wires are present and not damaged. If one or both lock wires are installed, and either one or both are damaged, before further flight, removing and reassembling the housing and slider group of the T/R rotating controls.

- Within 100 hours TIS, removing and reassembling the housing and slider group of the T/R rotating controls.

- Removing and reassembling the housing and slider group of the T/R rotating controls, either within 100 hours TIS or because a lock wire is damaged, is terminating action for the repetitive inspections.

## **Differences between this Proposed AD and the EASA AD**

The EASA AD requires reassembling the housing and slider group within 100 flight hours or 7 months, while the proposed AD would require this action within 100 hours TIS.

## **Costs of Compliance**

We estimate that this proposed AD would affect 146 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD. Based on an average labor rate of \$85 per hour, inspecting the lock wire will require about 0.25 work-hour, for a cost per helicopter of \$22 and a total cost to U.S. operators of \$3,212 per inspection cycle. If necessary, installing a lock wire will require about 0.25 work-hour and the required parts cost would be negligible, for a cost per helicopter of \$22 and a total cost to U.S. operators of \$3,212. Removing and reassembling the housing and slider group of the T/R rotating controls would require about 8 work-hours, for a cost per helicopter of \$680 and a total cost to U.S. operators of \$99,280.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**AGUSTA S.P.A. HELICOPTERS (TYPE CERTIFICATE CURRENTLY HELD BY AGUSTAWESTLAND S.P.A.) (AGUSTA):** Docket No. FAA-2013-0478;

Directorate Identifier 2012-SW-092-AD.

**(a) Applicability.**

This AD applies to Agusta Model A109C, A109S, and A109K2 helicopters, all serial numbers; Model A109E helicopters, serial number (S/N) 11002 through 11807 except S/N 11796; and Model AW109SP helicopters, S/N 22202 through 22278, except S/N 22239, 22264, 22266, 22272, 22273, 22275, and 22277, certificated in any category.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as a missing or broken lock wire securing the tail rotor (T/R) duplex bearing locking nut (locking nut). This condition could result in loosening of the locking nut, failure of the T/R, and subsequent loss of control of the helicopter.

**(c) Comments Due Date.**

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.



**(e) Required Actions.**

(1) Within 5 hours time-in-service (TIS), inspect each lock wire securing the T/R locking nut to the housing.

(i) If only one lock wire is installed and it is not damaged, before further flight, install a second lock wire.

(ii) If one or both lock wires are installed, and either one or both are damaged, before further flight, remove and reassemble the housing and slider group of the T/R rotating controls.

(2) Within 25 hours TIS from the inspection required by paragraph (e)(1) of this AD, and thereafter at intervals not exceeding 25 hours TIS, inspect the lock wires which secure the T/R locking nut to the housing. If either lock wire is missing or damaged, before further flight, remove and reassemble the housing and slider group of the T/R rotating controls.

(3) Within 100 hours TIS, remove and reassemble the housing and slider group of the T/R rotating controls.

(4) Removing and reassembling the housing and slider group of the T/R rotating controls as required by either paragraph (e)(1)(ii) or (e)(2) is terminating action for this AD.

**(f) Special flight permit.**

Special flight permits are prohibited.

**(g) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety

Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5110; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(h) Additional Information.**

(1) Agusta Bollettino Tecnico (BT) No. 109-134 for Model A109C helicopters, BT No. 109EP-121 for Model A109E helicopters, BT No. 109S-48 for Model A109S helicopters, BT No. 109K-54 for Model A109K2 helicopters, and BT No. 109SP-051 for Model AW109SP helicopters, all dated September 21, 2012, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency AD No. 2012-0195-E, dated September 24, 2012, and corrected September 25, 2012.

**(i) Subject.**

Joint Aircraft Service Component (JASC) Code: 6400: Tail Rotor System.

Issued in Fort Worth, Texas, on May 28, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-13293 Filed 06/04/2013 at 8:45 am; Publication Date: 06/05/2013]